

active component and 7.2 to 49.4 wt.% of nickel oxide, said catalyst containing a composite oxide of aluminum and nickel;

adding steam or a reaction gas containing steam and oxygen to the gas stream; and

effecting a hydrolysis reaction between the at least one compound and the steam, thereby producing a treated gas containing hydrogen fluoride.

---

*S&P1*  
*C2*

44. (Amended) A process according to Claim 40, wherein the catalyst further comprises 15.1 to 40.6% by weight of zinc oxide.

45. (Amended) A process according to Claim 40, wherein the catalyst consists essentially of alumina and nickel oxide and a composite oxide of aluminum and nickel.

---

48. (Amended) A method of treating a gas containing a perfluoro-compound, comprising:

*C3*

contacting the gas at a temperature of 400 to 800°C with a catalyst comprising aluminum oxide as an active component and 7.2 to 49.4 wt.% of nickel oxide, said catalyst containing a composite oxide of aluminum and nickel, in the presence of steam, whereby the perfluoro-compound is decomposed by hydrolysis to produce a treated gas containing hydrogen fluoride and acidic compounds; and

contacting the treated gas with water to absorb the hydrogen fluoride and the acidic compounds from the treated gas.

---

*C4*

51. (Amended) A process according to Claim 48, wherein the catalyst consists essentially of alumina and nickel oxide and composite oxide of aluminum and nickel.

---

Please add claims 75-79 as follows:

75. (New) A process according to claim 40, wherein the compound in the

*non etch*  
gas stream is SF<sub>6</sub>.

76. (New) A process according to claim 40, wherein the compound in the  
gas stream is carbon, fluorine and hydrogen.

*FS*  
77. (New) A process according to claim 40, wherein the compound in the  
gas stream is NF<sub>3</sub>.

78. (New) A process according to claim 40, wherein the compound in the  
gas stream is at least one member selected from the group consisting of CHF<sub>3</sub>,  
CH<sub>2</sub>F<sub>2</sub>, CH<sub>3</sub>F, C<sub>2</sub>HF<sub>5</sub>, C<sub>2</sub>H<sub>2</sub>F<sub>4</sub>, C<sub>2</sub>H<sub>3</sub>F<sub>3</sub>, C<sub>2</sub>H<sub>4</sub>F<sub>2</sub>, C<sub>2</sub>H<sub>5</sub>F, CH<sub>2</sub>OCF<sub>2</sub>, SF<sub>6</sub> and NF<sub>3</sub>.

79. (New) A process according to claim 40, wherein the fluorine compound-  
containing gas to be treated is used as etchants or cleaners for semiconductors.